

# Light wherever you need it

febi Light Portfolio





www.febi.com

**bilstein**group<sup>®</sup>

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# febi Truck -**Your Specialist for Commercial Vehicle Replacement Parts**

Ferdinand Bilstein is one of the world's leading suppliers and manufacturers of repair solutions for commercial vehicles and passenger cars. The company has been producing replacement parts for trucks, trailers, and buses under the febi brand for decades. Since 2020, articles for agricultural vehicles have also been gradually added to the range. Thanks to the extensive, dynamically growing product portfolio, febi is in a position to offer tailor-made solutions for every customer. The febi brand is firmly established in the Independent Automotive Aftermarket (IAM) and, in the commercial vehicle sector, it has a leading market position in the core competencies of steering and suspension, braking, clutches, and engine thermal management.

febi currently offers you a selection of more than 3,200 replacement parts for agricultural vehicles, which is constantly being expanded. The range includes products suitable for all well-known manufacturers: John Deere, Case New Holland, Deutz - FAHR, Massey Ferguson, Fendt, Steyr, Claas, Kubota, Valtra, Landini and many more.

# **Brochure Content**

Halogen Beacons LED Beacons Brackets for Beacons

**Position Lights** Side Marker Lights Accessories for Side Marker Lights Number Plate Lamps



Steering

& Suspension

Pneumatics





NVH

Clutch



Wheel Fastening





Drivetrain



Auxiliarv Belt Drive







Engine Thermal Management





Engine Management

Engine

Components

**₩** 











With the QR-Codes beside each article, you get to the product page in febi partsfinder. For Work Lights you find the diagram of the light beam with detailed meter and lumen data in the product pictures.

Chassis & Cabin

Filtration

Fluids

**Specialist Tools** 

febiPLUS

Braking





Chassis

Suspension







Electrics

Ω, .





Fuel & Exhaust



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# Vehicle Lighting and **Light Signalling Regulations**

Since 2005, new road traffic regulations have been in force in the EU for the entire vehicle lighting system. Among other things, all luminaires of the same kind must be mounted with equal strength, equal height and symmetrical to the middle when mounted in pairs. However, if a vehicle was built before 2005, the exception is that the lamps were already installed before the regulation came into effect.

If a lamp is approved according to the appropriate ECE regulation for a specific use on a vehicle it does not mean that it can be used for every purpose on every position. It may only be used as the lamp for which it is approved.

ECE R1	Vehicle headlamps	ECE R77	Parking lights, front and tail
ECE R3	Reflectors	ECE R87	Daytime running lights (DRL)
ECE R4	Rear license plate lighting	ECE R91	Side markers
ECE R6	Indicator front, tail and on the sides	ECE R98	Xenon headlamps
ECE R7	Position-, tail-, brake- and width marker lamp	ECE R112	Halogen and LED headlamps
ECE R10	Electromagnetic compatibility (EMC)	ECE R119	Cornering lamps
ECE R19	Fog lamps	ECE R123	Advanced Focus System, head light (AFS)
ECE R23	Reverse lamps	ECE R128	LED light sources
ECE R38	Rear fog lights	ECE R148	This Regulation combines the provisions of individual UN Regulations Nos. 4, 6, 7, 23, 38, 77, 87 and 91 into a single Regulation, and is the outcome of the World Forum for Harmonization of Vehicle Regulations (WP.29) decision to simplify the lighting and light-signalling regulations based on the initial proposal by the European Union and Japan.
ECE R48	Installation of lighting and light-signaling devices	SAE J595	Requirements for use on authorized emergency, maintenance, and service vehicles
ECE R65	Warning lights	CISPR 25	Radio disturbance chrachteristics for the protection of receivers used on board vehicles, boats, and on devices - Limits and methods of measurement. It is devided into classes from 1 to 5. Class 5 fulfils the highest standards.

#### WEEE Compliant



The "Waste Electrical and Electronic Equipment" Guideline 2012/19/EU regulates the distribution as well as the take-back and proper disposal of waste electrical and electronic equipment within the European currency area.



Approval for use on a dangerous goods vehicle.



**IP-Classification** 

The IP classification (e.g. IP6K9K), specifies an internationally valid value according to ISO 20653 and DIN EN 60529, which defines the degree of protection provided by mechanical casings and electrical enclosures against intrusion, dust, accidental contact, and water.

First digit		Description		
ISO 20653	DIN EN 60529	Protection against foreign objects	Protection against contact	
	0	No protection	No protection	
	1	Protection against solid foreign objects with diameter $\ge$ 50 mm	Protection against access with back of hand	
	2	Protection against solid foreign objects with a diameter $\ge$ 12.5 mm	Protection against access with a finger	
	3	Protection against solid foreign objects with a diameter $\ge$ 2.5 mm	Protection against access with a tool	
	4	Protection against solid foreign objects with diameter $\ge$ 1.0 mm	Protection against access with a wire	
5K	5	Protection against dust in harmful quantities	Complete protection against contact	
6K	6	Dust-tight	Complete protection against contact	



	nd digit	Seco
) Wa	DIN EN 60529	ISO 20653
	0	
Prot	1	
Protection against falling	2	
Protection agains	3	
Protection a	4	4K
Protection ag	5	
Protec	6	6K
Protecti	7	
Protection against permaner is provid	8	
Protection against v	9	9К



#### Description

ater Protection Classification

No protection

tection against dripping water

dripping water if the enclosure is inclined up to 15°

st falling spray water up to 60° from vertical

against splashing water from all sides

gainst water jets (nozzle) from any angle

ection against strong jets of water

ion against temporary submersion

ent submersion. Unless otherwise specified, protection ded up to a water depth of 1 metre.

water during high-pressure/steam jet cleaning

# febi ProKit -

# The Complete Solution for a Professional Repair

With ProKit, we offer an innovative product line which saves workshops time and money as febi ProKits are guaranteed to contain all the parts needed for the repair in question.

- ✓ With its ProKits for commercial vehicles, febi has established innovative, complete repair solutions for heavy-goods vehicles!
- Practicality-oriented, complete sets are perfectly tailored to specific repair requirements and contain all the necessary installation materials alongside the individual replacement parts.
- ✓ Additional trips to obtain replacements of items, such as corroded screws or nuts, therefore become a thing of the past.
- ✓ Saves workshops money as well as time.



# **3 Year Manufacturer Guarantee**

febi exclusively offers its customers replacement parts in OE matching quality. As a specialist with manufacturing competence, we only offer products with a high degree of installation safety and durability. We rely on more than 175 years of experience in metalworking which we use every day in our own production.



As a specialist with manufacturing competence, febi only offers products with a high degree of installation safety and durability. In order to underline our high product quality standards, we are providing a 3 year manufacturer's guarantee for all of our replacement parts – exceeding the statutory warranty. This is our commitment to quality. This is a real added value for everyone who trusts in febi products - from wholesalers and workshops to car and commercial vehicle drivers.

# febi Work Lights

Good visibility is extremely important for commercial vehicles or machines operating in the evening or at night. If there is insufficient lighting, vehicles and loads can be damaged and people could potentially get injured.

If there is an insufficiency of stationary light sources in the working area, necessary illumination can only be ensured with additional work lights on a vehicle.

You can rely on the wide selection of LED work lights from febi in OE matching quality. Thanks to modern, efficient LED technology, these achieve great luminous efficiency with comparatively low power consumption. This protects the vehicle battery and enables longer working hours with battery power.

All febi work lights meet the highest standards: they are 100% tested to ensure that each individual lamp delivers maximum performance.

Work lights are commonly installed on commercial vehicles to give additional light for loading or reversing. They vary in size, power, brightness, shape, and design depending on their use. As long as there is an on/off switch, they can be mounted everywhere on the vehicle. There are versions with floodlight, as well as with spot light.

**Please note:** Only mount the working light in an upright position on the vehicle. Leave the cable hanging down with a loop on the headlight before guiding the cable to the cable junction boxes or collections. This is done as a means of preventing possible ingress of moisture and water along the cable.





Access to febi Work Lights video on **YouTube** 



ECE R23

# **Finding the Right Light**

Finding the right light is not always easy as they differ only slightly visually. The most important information is normally how bright the work light is and how the light beam is spread. You can find both information in the febi identification (ID) number:

# S-1100-F-H-2

Shape of Housing (Square or Round)

Number of Raw Lumen Unbreakable High-End Glass Number of Version for this ID

Certain vehicle components are subject to regulations in the European Union including the vehicle lighting. These ECE regulations contain uniform, technical regulations which are relevant for the operating permit of the vehicle.

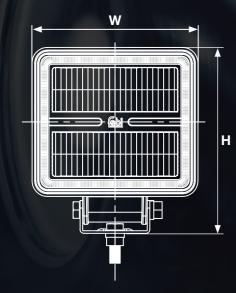
Light Beam

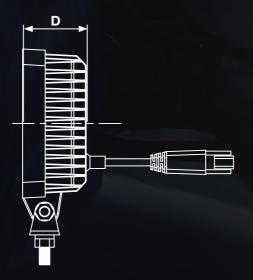
(Spot or Flood)

#### Note:

- Work lights can be installed as reversing light if they are certified according to the ECE R23.
- It is mandatory to install a switch between the vehicle and the work light to comply with these regulations.

# **Product Dimensions**





# **The Light Beam**

The light beam of a driving light is controlled by the shape and form of the reflector or the glass. A spot beam gives a long and narrow light beam. A flood beam gives a light beam that is similar to the standard light beam, but it is longer and wider.

# Lumen

Lumen is a common measurement which is used to compare the strength of the light emitted from a light source.

It measures the flow of the light in every direction. It is measured as raw (out of laboratory) and as actual lumen (from the lamp itself).

# **Our Quality Solution**

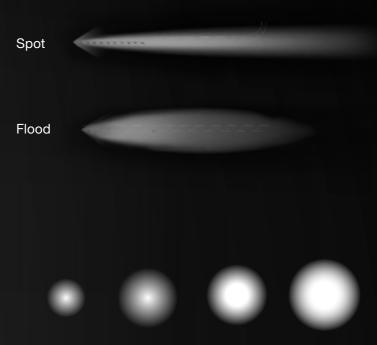
febi work lights are approved for the highest demands. They are 100 % inspected to ensure every single lamp can achieve maximum performance.



# Water Spray Tester

The water spray tester simulates real environmental conditions for rain, spray mist, and water jets with increased pressure. Additional salt spray tests show the resistances of corrosion on materials and coating.

There are three dimensions used to measure work lights. These include width (W), height (H), and depth (D).



4 Lumens 49 Lumens 120 Lumens 255 Lumens

# Water Tester

IP67 tested work lights survive the complete immersion in water for at least 30 minutes without being damaged. Additional high-temperature, water jets compatibility is necessary for the highest protecting rating IP6K9K, which mainly stands for maximum durability of a work lamp and complies with ISO 20653.



febi 104007



febi 104018



# S-720-F-H

- Raw Lumen Dimension (W x H x D) Voltage Beam Watt IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals
- 720lm 70 x 101 x 41 12 - 36V IP6K9K

Flood

-30° to +50°C

Aluminium

0,28 m

R10

EMC

8W

PC









Raw Lumen Voltage Beam Watt IP Rating

febi 104004

febi 104009



Raw Lumen Voltage Beam Watt IP Rating Approvals



Raw Lumen Voltage Beam Watt IP Rating Approvals

Raw Lumen Dimension (W x H x D) Voltage Beam Watt IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

S-800-F

800lm 50 x 82 x 60 9 - 32V Flood 10W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC

# S-800-F-H

Raw Lumen Dimension ( $W \times H \times D$ ) Voltage Beam Watt IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

800lm 50 x 78 x 63 12 - 32V Flood 14W IP6K9K -30° to +50°C PC Aluminium 0,28 m R10 EMC



# **Work Lights**

# S-1100-F

- Dimension (W x H x D)
- Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals
- 1100lm 108 x 135 x 40 9 - 32V Flood 15W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC

# R-1100-F

- Dimension (W x H x D)
- Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm
- 1100lm 115 x 135 x 36 9 - 32V Flood 15W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC

# S-1200-F

- Dimension ( $W \times H \times D$ )
- Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm

1200lm 122 x 99 x 78 9 - 32V Flood 12W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC









febi 104016



febi 104022



# S-1200-F-2

Raw Lumen Dimension (W x H x D) Voltage Beam Watt IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

S-1440-F-H

Raw Lumen

Voltage

Beam

Watt

IP Rating

Dimension (W x H x D)

Working Temperature

Material of Housing

Fulfills ECE Norm

Material of Lens

Cable Length

Approvals

1200lm 109 x 134 x 39 10 - 30V Flood 15W IP67 -40° to +60°C PC Aluminium

1,5 m

EMC

R10, R23



1440lm 105 x 134 x 52 9 - 36V Flood 18W IP6K9K -30° to +50°C PC Aluminium 0,28 m R10. R23 EMC

# S-1440-F-H-2-ADR

Raw Lumen Dimension (W x H x D) Voltage Beam Watt IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

105 x 134 x 52 9 - 36V Flood 18W IP6K9K -30° to +50°C PC Aluminium 0,28 m R10, R23 EMC,ADR

1440lm





febi 104001



Raw Lumen Voltage Beam Watt IP Rating

febi 172405



Beam Watt

febi 171583



Raw Lumen Voltage Beam Watt IP Rating







# **Work Lights**

# S-1800-F

- Dimension (W x H x D)
- Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals
- 1800lm 160 x 47 x 64 9 - 32V Flood 18W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC

# O-1800-F-DT

- Connection Type Raw Lumen Dimension ( $W \times H \times D$ ) Voltage
- IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals \* Fitting cable

# O-1800-F

- Dimension (W x H x D)
- Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

**Deutsch Connector** 1800lm 143 x 125 x 60 9 - 32V Flood 24W IP6K9K -40° to +60°C PC Aluminium 0.05 m R10 EMC 177149, 177150

1800lm 143 x 125 x 60 9 - 32V Flood 24W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC









R

febi 104014



febi 104017





# S-2000-F

Raw Lumen Dimension (W x H x D) Voltage Beam Watt IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

S-2160-F-H

Raw Lumen

Material of Lens

Fulfills ECE Norm

Cable Length

Approvals

Voltage

Beam

Watt IP Rating 2000lm 109 x 134x 56 10 - 30V Flood

27W

IP67

PC

1,5 m

EMC

R10, R23



-40° to +50°C Aluminium



2160lm Dimension (W x H x D) Working Temperature PC Material of Housing R10

# S-2160-S-H

Raw Lumen Dimension (W x H x D) Voltage Beam Watt IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals



125 x 150 x 60 12 - 36V Flood 22W IP6K9K -30° to +50°C Aluminium 0,28 m EMC

2160lm

12 - 36V

Spot

22W

PC

IP6K9K

125 x 149 x 60

-30° to +50°C

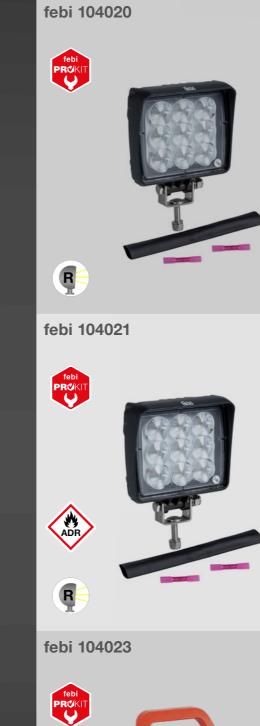
Aluminium

0,28 m

R10

EMC







Voltage Beam Watt IP Rating Approvals

# Work Lights

# S-2160-F-H-2

Raw Lumen Dimension (W x H x D) Voltage Beam

Watt

Beam

Watt

IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

2160lm 123 x 142 x 58 12 - 36V Flood 8W IP6K9K -30° to +50°C PC Aluminium 0.28 m R10, R23 EMC

# S-2160-F-H-3-ADR

Raw Lumen Dimension ( $W \times H \times D$ ) Voltage

IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

123 x 142 x 58 12 - 36V Flood 18W IP6K9K -30° to +50°C PC Aluminium 0,28 m R10. R23 EMC, ADR

2160lm

# S-2160-F-H-4

Raw Lumen Dimension (W x H x D)

Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm With an ON/OFF switch 2160lm 125 x 220 x 73 12 - 36V Flood 22W IP6K9K -30° to +50°C PC Aluminium 0,28 m R10 EMC









### febi 104005





#### Dimension (W x H x D) Voltage Beam Watt

S-2200-F

Raw Lumen

Voltage

Beam

Watt

IP Rating

Dimension ( $W \times H \times D$ )

Working Temperature

Material of Housing Cable Length

Material of Lens

Fulfills ECE Norm

Approvals

R-2200-F

Raw Lumen

IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals

2200lm 115 x 135 x 36 9 - 32V Flood 27W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC

2200lm

9 - 32V

IP6K9K

Flood

27W

PC

1,5 m

R10

EMC

108 x 135 x 40

-40° to +60°C

Aluminium

### febi 104010



### S-2500-F

Raw Lumen
Dimension (W x H x D)
Voltage
Beam
Watt
IP Rating
Working Temperature
Material of Lens
Material of Housing
Cable Length
Fulfills ECE Norm
Approvals

# 

2500lm 109 x 117 x 70 9 - 32V Flood 27W IP6K9K -40° to +60°C PC Plastic 1,5 m R10 EMC



# febi 173159

ADR

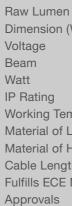
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**febi**PLUS febi 104006



# Raw Lumen Voltage Beam Watt IP Rating Approvals

Watt





# Work Lights

# S-2500-F-DT

- Connection Type Raw Lumen Dimension (W x H x D) Voltage Beam
- IP Rating Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm Approvals \* Fitting cable

# R-2700-F

- Dimension (W x H x D)
- Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm

#### **Deutsch-Connector** 2500lm 115 x 145 x 49 9 - 36V Flood + Spot 24W IP6K9K -40° to +60°C PC Aluminium 0.05 m R148, R10 EMC, ADR 177149, 177150

2700lm 117 x 128 x 70 9 - 32V Flood 42W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC

# S-3071-F

- Dimension ( $W \times H \times D$ )
- Working Temperature Material of Lens Material of Housing Cable Length Fulfills ECE Norm

3071lm 110 x 126 x 72 9 - 32V Flood 48W IP6K9K -40° to +60°C PC Aluminium 1,5 m R10 EMC









febi 177149

# 

**Connection Type** Dimension (L) Approval

S-4800-F-H

Raw Lumen

Voltage

Beam

Watt IP Rating

Dimension ( $W \times H \times D$ )

Working Temperature

Material of Lens

Fulfills ECE Norm

Cable Length

Approvals

Material of Housing

Fits for all lamps with **Deutsch-Connector** 

4800lm 110 x 136 x 66 12 - 36V Flood 40W IP6K9K -30° to +50°C PC Aluminium 0,28 m R10 EMC

Deutsch-Connector

2,0 m

ADR

# **Ensure Functionality Even** in Darkness

with the multi applicable safety lamp from febi

In summer, due to heat and UV radiation, crop protection should only be applied after dusk or outside the main sunshine hours. But the darkness makes it difficult to monitor the function of the spray pattern. As a solution febi offers the safety lamp 172826, which can be attached to the boom of the field sprayer to make its spray mist visible. This allows the adjustment of the nozzles to be corrected if necessary and defective nozzles to be detected quickly. Functionality can be checked even in the dark and crop failure can be prevented.





febi 177150



Connection Type Dimension (L) Approval

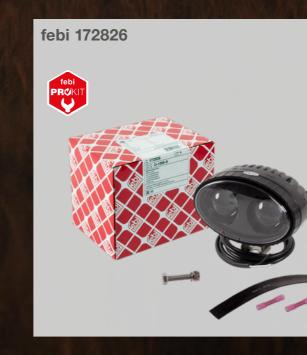
Fits for all lamps with **Deutsch-Connector** 

5.0 m ADR



Deutsch-Connector





Voltage Beam Watt IP Rating Approvals Colour



Dimension ( $W \times H \times D$ )

Working Temperature Material of Housing Cable Length

142 x 121 x 85 9 - 64V Spot 10W IP6K9K -40° to +60°C Aluminium 1,5 m EMC blue



# Easily Visible From Any Angle: Beacons

Beacons are used in road traffic to warn of possible dangers, such as slow, larger trucks for example. They emit light in all directions so as to be clearly visible from any angle.

febi has beacons with three different mounting types in range:

- DIN connector
- Three bolt fixation open end
- Magnetic fixation, plug DIN 4165

# **Offering More**

Beacons with a DIN connector or screw connection are suitable for fixed installation on the vehicle. Lights with a magnetic base can be attached to any vehicle without any additional bracket.

Furthermore, febi also offers matching holders and replacement lenses as accessories.



# LED or Halogen?

febi offers beacons both with halogen lamps and LED lamps. The latter is ideal when a beacon with a very long service life, vibration resistance, and energy efficiency is required. However, if the light is rarely used or there is a risk that it will often be damaged and will have to be replaced frequently, the halogen version makes more sense.

The luminous intensity of the halogen and LED versions is similar and complies with all legal requirements.







**Did You Know?** Having 100% LED products on your vehicle could reduce your lighting carbon footprint by 80%.

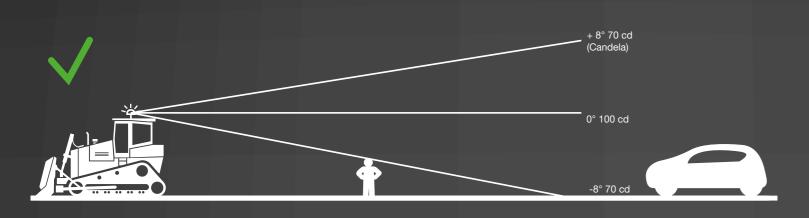


The LED version is available in both a low and high design and can be used in the power range of 9 to 30 volts. The halogen version is supplied with a 12V and a 24V lamp, meaning it can be used in both voltage ranges.

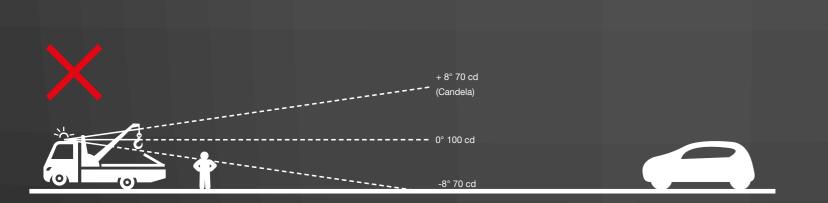


100% Bulbs Halogen LED 100%

# Mounting on Vehicle and Light **Distribution According to ECE R65**



The beacon has to be visible from all directions without being blocked by any part of the vehicle.



In this scenario, only a single warning light is mounted on the roof of the vehicle. The crane blocks the light from being clearly seen on the rear side. The solution: an additional warning light should be mounted. This can either be placed at the rear or it can be mounted on the roof alongside the already existing light.



Approval Watt Voltage

febi 104043

febi 104041

ADR

Approval Watt Voltage

# febi 104044



Approval Watt Voltage

# Halogen Beacons



Connection Type Quantity of Blinking Patterns Fastening Type Dimension (W x H) Fulfills ECE Norm

Lighting System Protection Type (IP Code) **Temperature Range** 

**DIN Connector** bolted / screwed 132 x 185 mm R10, R65 EMC, ADR 55 W - 70 W Halogen (H1) IP67 12 V / 24 V -30°C to +50°C

Connection Type Quantity of Blinking Patterns Fastening Type Dimension (W x H) Fulfills ECE Norm

Lighting System Protection Type (IP Code) **Temperature Range** 

**DIN** flexible 1 Clamping Screw 132 x 243 mm R10, R65 EMC, ADR 55 W - 70 W Halogen (H1) IP67 12 V / 24 V -30°C to +50°C



Quantity of Blinking Patterns Fastening Type Dimension (W x H) Cable Length Fulfills ECE Norm

Lighting System Protection Type (IP Code) **Temperature Range** 

bolted / screwed 132 x 199 mm 0,26 m R10, R65 EMC, ADR 55 W - 70 W Halogen (H1) IP67 12 V / 24 V -30°C to +50°C

1

# **Halogen Beacons**

# febi 104045



Quantity of Blinking Patterns Fastening Type Dimension (W x H) Cable Length Fulfills ECE Norm Approval Watt Lighting System Protection Type (IP Code) Voltage Temperature Range



1 three-point fixing 144 x 166 mm 0.26 m R10, R65 EMC, ADR 55 W - 70 W Halogen (H1) IP67 12 V / 24 V -30°C to +50°C

febi 104048



Approval Watt Voltage

#### febi 104046



febi 104047



Fulfills ECE Norm Approval Watt Lighting System Protection Type (IP Code) Voltage Plug / Socket Connector **Temperature Range** 

Quantity of Blinking Patterns

Fastening Type

Cable Length

Dimension (W x H)

Magnet Mount 144 x 166 mm 3,5 m R10, R65 EMC, ADR 55 W - 70 W Halogen (H1) IP67 12 V / 24 V on-board-voltage plug (DIN 4165) -30°C to +50°C

1

1

Quantity of Blinking Patterns Fastening Type Dimension (W x H) Cable Length Fulfills ECE Norm Approval Watt Lighting System Protection Type (IP Code) Voltage Plug / Socket Connector

**Temperature Range** 

Magnet Mount 132 x 177 mm 3,5 m R10, R65 EMC, ADR 55 W - 70 W Halogen (H1) IP67 12 V / 24 V on-board-voltage plug (DIN 4165) -30°C to +50°C



febi 104050



Approval Watt Voltage

# febi 104051



Approval Watt Lighting System Voltage



Connection Type Quantity of Blinking Patterns Fastening Type Dimension (W x H) Fulfills ECE Norm

Lighting System Protection Type (IP Code) Temperature Range

**DIN Connector** 4 bolted / screwed 132 x 185 mm R10, R65 (rotation only) EMC, ADR 12 W LED IP67 9 - 30 V -30°C to +50°C

Connection Type Quantity of Blinking Patterns Fastening Type Dimension (W x H) Fulfills ECE Norm

Lighting System Protection Type (IP Code) Temperature Range

DIN flexible 4 Clamping Screw 132 x 243 mm R10, R65 (rotation only) EMC, ADR 12 W LED IP67 9 - 30 V -30°C to +50°C



Quantity of Blinking Patterns Fastening Type Dimension (W x H) Cable Length Fulfills ECE Norm

Protection Type (IP Code) Temperature Range

4 bolted / screwed 132 x 199 mm 0,26 m R10, R65 (rotation only) EMC, ADR 12 W LED IP67 9 - 30 V -30°C to +50°C





Quantity of Blinking Patterns Fastening Type Dimension (W x H) Cable Length Fulfills ECE Norm Approval Watt Lighting System Protection Type (IP Code) Voltage Temperature Range

three-point fixing 144 x 166 mm R10, R65 (rotation only) EMC, ADR

4

0.26 m

12 W

LED

IP67

9 - 30 V

-30°C to +50°C



febi 104055



Approval Watt Lighting System Voltage

### febi 104053



febi 104054



Fastening Type Dimension (W x H) Cable Length Fulfills ECE Norm Approval Watt Lighting System Protection Type (IP Code) Voltage Plug / Socket Connector

Quantity of Blinking Patterns

**Temperature Range** 

Fastening Type

Cable Length

Approval

Voltage

Watt

Dimension (W x H)

Fulfills ECE Norm

Lighting System

**Temperature Range** 

4 Magnet Mount 144 x 166 mm 3.5 m R10, R65 (rotation only) EMC, ADR 12 W LED IP67 9 - 30 V on-board-voltage plug (DIN 4165) -30°C to +50°C

Quantity of Blinking Patterns 4 Magnet Mount 132 x 177 mm 3,5 m R10, R65 (rotation only) EMC, ADR 12 W LED IP67 Protection Type (IP Code) 9 - 30 V Plug / Socket Connector on-board-voltage plug (DIN 4165) -30°C to +50°C



febi 104057



# Approval Watt Voltage

# febi 104058



Cable Length Approval Watt Lighting System Voltage



Connection Type Quantity of Blinking Patterns Fastening Type Dimension (W x H) Fulfills ECE Norm

Protection Type (IP Code) Temperature Range

**DIN Connector** 4 bolted / screwed 122 x 98 mm R10, R65 (rotation only) EMC, ADR 12 W LED IP67 9 - 30 V -30°C to +50°C

**Connection Type** Quantity of Blinking Patterns Fastening Type Dimension (W x H) Fulfills ECE Norm

Lighting System Protection Type (IP Code) Temperature Range

DIN flexible 4 Clamping Screw 122 x 156 mm R10, R65 (rotation only) EMC, ADR 12 W LED IP67 9 - 30 V -30°C to +50°C



Quantity of Blinking Patterns Fastening Type Dimension (W x H) Fulfills ECE Norm

Protection Type (IP Code) Temperature Range

4 bolted / screwed 122 x 111 mm 0,26 m R10, R65 (rotation only) EMC, ADR 12 W LED IP67 9 - 30 V -30°C to +50°C





### febi 104060



# febi 104061



Quantity of Blinking Patterns Fastening Type Dimension (W x H) Cable Length Fulfills ECE Norm Approval Watt Lighting System Protection Type (IP Code) Voltage **Temperature Range** 

Quantity of Blinking Patterns

Fastening Type

Dimension (W x H) Cable Length

Fulfills ECE Norm

Lighting System

Protection Type (IP Code)

Plug / Socket Connector

**Temperature Range** 

Fastening Type

Cable Length

Approval

Voltage

Watt

Dimension (W x H)

Fulfills ECE Norm

Lighting System

**Temperature Range** 

Approval

Watt

Voltage

4 three-point fixing 140 x 71 mm 0,26 m R10, R65 (rotation only) EMC. ADR 12 W LED IP67 9 - 30 V -30°C to +50°C



febi 104028



febi 104029



DIN - ISO

# febi 104030



DIN - ISO

Magnet Mount 140 x 91 mm 3,5 m EMC, ADR 12 W LED IP67 9 - 30 V -30°C to +50°C

R10, R65 (rotation only)

# **Replacement Glass for Beacons**

In addition to our broad range of beacons, we also have the corresponding replacement glasses in our assortment in proven OE matching quality, of course.

We offer two different versions - flat and high. This covers all beacons in the febi program.



febi 104039 high version febi 104038 flat version



Magnet Mount 91 x 140 mm R10, R65 (rotation only)

9 - 30 V on-board-voltage plug (DIN 4165) -30°C to +50°C

Quantity of Blinking Patterns 4 Protection Type (IP Code)

4

3.5 m

12 W

LED

IP67

EMC, ADR

## **Beacon Brackets**



Connection Type Fastening Type Dimension (W x H) DIN - ISO

**DIN Connector** two-point fastening 102 x 160 mm 72591



Connection Type Fastening Type Dimension (W x H)

**DIN Connector** three-point fastening 95 x 115 mm 72591



Connection Type Fastening Type Dimension (W x H)

**DIN Connector** bolted / screwed 24 x 102 mm 72591



Connection Type Fastening Type Dimension (W x H) DIN - ISO

**DIN Connector** two-point fastening 113 x 120 mm 72591

### **Beacon Brackets**

# febi 104032



febi 104033



febi 104036



febi 104037



Connection Type Fastening Type Dimension (W x H) DIN - ISO

**DIN Connector** two-point fastening 113 x 137 mm 72591



**DIN Connector** two-point fastening 109 x 121 mm 72591

# **Strobe Lights**

Strobe lights are mounted horizontally or vertically onto the vehicle front in order to achieve an ideal warning effect for other road users.

febi supplies the lights as a ProKit with the necessary fixing material, crimp connectors, and shrink tubing for a professional and durable electrical connection. IP rating IP67 ensures continuous protection against dust and splash water.

The strobe lights can be used in combination with other strobe lights to flash synchronously or alternately. All strobe lights offered by febi are suitable for a power range of 9 to 30 volts.



Connection Type Fastening Type Dimension (W x H) DIN - ISO

**DIN Connector** two-point fastening 117 x 102 mm 72591



Connection Type

Fastening Type

DIN - ISO

Dimension (W x H) 72591

**DIN Connector** two-point fastening 95,2 x 135 mm

Connection Type

Dimension (W x H)

Fastening Type

DIN - ISO

## Strobe Lights

# **Perfect Warning Effect:**

Signal cable simultaneous or alternating flash mode

# **Strobe Lights**

# febi 109256



### febi 109257



febi 109258



febi 109259



Quantity of Blinking Patterns Dimension Cable Length Fulfills ECE Norm Approval Watt Protection Type (IP Code) Voltage Temperature Range Colour

Quantity of Blinking Patterns

Dimension

Dimension

Approval

Watt

Voltage

Colour

Cable Length

Fulfills ECE Norm

**Temperature Range** 

Cable Length

11 94 x 32 x 11 mm 1,5 m R10 EMC, SAE J595 9 W IP67 9 - 30 V -40°C to +65°C orange (amber)



#### febi 109260



#### febi 109261



# febi 109262



### febi 109263



Dimension Cable Length Approval Watt Voltage Colour

Watt

Colour

Fulfills ECE Norm Approval Watt Protection Type (IP Code) Voltage **Temperature Range** Colour

Quantity of Blinking Patterns

19 109.9 x 32 x 11 mm 1.5 m R10. R65 EMC. SAE J595 12 W IP67 9 - 30 V -40°C to +65°C orange (amber)

19 121.6 x 32 x 11 mm 1.5 m R10, R65 EMC. SAE J595 -40°C to +65°C

18 W Protection Type (IP Code) IP67 9 - 30 V orange (amber)

19

Quantity of Blinking Patterns Dimension Cable Length Fulfills ECE Norm Approval Watt Protection Type (IP Code) Voltage **Temperature Range** Colour

121.6 x 43.5 x 11 mm 1,5 m R10, R65 EMC. SAE J595 36 W IP67 9 - 30 V -40°C to +65°C orange (amber)



Cable Length Approval Watt Voltage Colour

Watt

Colour

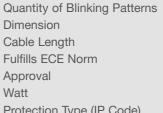
# **Strobe Lights**



Quantity of Blinking Patterns Dimension Cable Length Fulfills ECE Norm Approval

Protection Type (IP Code) Voltage **Temperature Range** 

11 88.4 x 28 x 17.2 mm 1,5 m R10 EMC, SAE J595 9 W IP67 9 - 30 V -40°C to +65°C orange (amber)



Protection Type (IP Code) **Temperature Range** 

19 104.4 x 28 x 17.2 mm 1,5 m R10, R65 EMC. SAE J595 12 W IP67 9 - 30 V -40°C to +65°C orange (amber)



Quantity of Blinking Patterns Dimension Cable Length Fulfills ECE Norm Approval Protection Type (IP Code)

Voltage **Temperature Range** 

19 132.7 x 28 x 17.2 mm 1.5 m R10, R65 EMC. SAE J595 18 W IP67 9 - 30 V -40°C to +65°C orange (amber)



Quantity of Blinking Patterns Fulfills ECE Norm

Protection Type (IP Code) **Temperature Range** 

19 131.2 x 46.8 x 17.2 mm 1,5 m R10, R65 EMC. SAE J595 36 W IP67 9 - 30 V -40°C to +65°C orange (amber)



febi 173961

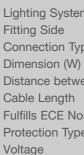


Lighting System Fitting Side Cable Length Voltage

Fitting Side Cable Length Voltage

# febi 173962





febi 173963



Fitting Side Cable Length Voltage

# **Position, Side Marker and Number Plate Lights**

Maintenance-free LEDs for a long life

- All common approvals for the different applications
- Simple connection and installation
- Large selection for common vehicle types, LCV, trailers,
- semi-trailers and trucks.
- Long cable for trouble-free installation
- The closure cap is always included.



#### **Did You Know?**

febi offers all universal position, side marker and number plate lights with P&R connectors.

P&R System - Press & Ready System

The P&R wiring system is a contact option characterised by quick and uncomplicated installation on the vehicle. These lights can be mounted in a 2-wire flat cable at any desired location. Thanks to a silicone single-wire seal, they are absolutely waterproof and may also be used in the transport of dangerous goods (ADR).

# **Position Lights**

Connection Type Dimension (W) Distance between Mounting Holes Fulfills ECE Norm Protection Type (IP Code)

Lighting System Connection Type Dimension (W) Distance between Mounting Holes Fulfills ECE Norm Protection Type (IP Code)

Lighting System **Connection Type** Distance between Mounting Holes Fulfills ECE Norm Protection Type (IP Code)

LED left PRS 182 mm 78 mm 0,5 m R7, R91 IP67 12 - 24 V

Lighting System Connection Type Dimension (W) Distance between Mounting Holes Fulfills ECE Norm Protection Type (IP Code)

LED right PRS 182 mm 78 mm 0,5 m R7, R91 IP67

12 - 24 V









right PRS 181 mm 78 mm 0,5 m R7, R91 IP67 12 - 24 V

LED

left PRS 181 mm 78 mm 0,5 m R7, R91 IP67 12 - 24 V

LED

# **Position Lights**

# febi 173964



febi 173965



febi 173966



Fitting Side	left
Connection Type	PRS
Dimension (W)	173 mm
Distance between Mounting Holes	78 mm
Cable Length	0,5 m
Fulfills ECE Norm	R7, R10,
Protection Type (IP Code)	IP67
Voltage	12 - 24 V

Lighting System

Lighting System

Connection Type

Distance between Mounting Holes

Dimension (W)

Cable Length

Voltage

Fulfills ECE Norm

Protection Type (IP Code)

Fitting Side

Lighting System	LED
Fitting Side	right
Connection Type	PRS
Dimension (W)	173 mm
Distance between Mounting Holes	78 mm
Cable Length	0,5 m
Fulfills ECE Norm	R7, R10, R91
Protection Type (IP Code)	IP67
Voltage	12 - 24 V

LED

24 V

LED

PRS

left + right

129 mm

78 mm

0,5 m

IP67

12 - 24 V

R7, R10, R91

m R10, R91



#### febi 173968



Lighting System Colour Cable Length Voltage

febi 173971



Lighting System Fitting Side Connection Type Dimension ( $W \times H \times D$ ) Distance between Mounting Holes 116 mm Cable Length Fulfills ECE Norm Protection Type (IP Code) Voltage

febi 173974



Lighting System Fitting Side Connection Type Dimension ( $W \times H \times D$ ) Distance between Mounting Holes 84 mm Cable Length Fulfills ECE Norm Protection Type (IP Code) Voltage

febi 173978



Colour Cable Length Voltage



# **Position Lights**



Connection Type Dimension ( $W \times H \times D$ ) Distance between Mounting Holes Fulfills ECE Norm Protection Type (IP Code)

LED red PRS 130 x 32 x 15 mm 116 mm 0,5 m R3, R7 IP67 12 - 24 V

LED red PRS 130 x 32 x14 mm 0,5 m R7, R10, R91 IP67 12 - 24 V



LED red PRS 102 x 45 x14 mm 0,5 m R3, R7, R10 IP67 12 - 24 V



Lighting System

Connection Type Dimension (W x H x D) Distance between Mounting Holes 90 mm Fulfills ECE Norm Protection Type (IP Code)

LED red PRS 111 x 50 x 24 mm 0,5 m R3, R7 IP67 12 - 24 V



# **Position Lights**

# febi 173969



febi 173972



febi 173973



febi 173977



Lighting System Colour Connection Type Dimension ( $W \times H \times D$ ) Distance between Mounting Holes Cable Length Fulfills ECE Norm Protection Type (IP Code) Voltage

Lighting System

Connection Type

Cable Length

Fulfills ECE Norm

Dimension (W x H x D)

Protection Type (IP Code)

Distance between Mounting Holes

Colour

Voltage

Voltage

Colour

Voltage

Cable Length

Fulfills ECE Norm

Lighting System

Connection Type

Cable Length

Fulfills ECE Norm

Dimension (W  $\times$  H  $\times$  D)

Protection Type (IP Code)

Distance between Mounting Holes

Protection Type (IP Code)

130 x 32 x 15 mm 116 mm 0,5 m R3, R7

LED

white

PRS

IP67

LED

white

PRS

116 mm

0,5 m

IP67

R3, R7, R10

130 x 32 x 14 mm

12 - 24 V



#### febi 173967



# febi 173970



# febi 173975



Lighting System Colour Connection Type Dimension ( $W \times H \times D$ ) Distance between Mounting Holes Cable Length Fulfills ECE Norm Protection Type (IP Code) Voltage

# febi 173976



Lighting System Colour Connection Type Dimension (W x H x D) Distance between Mounting Holes Cable Length Fulfills ECE Norm Protection Type (IP Code) Voltage

Lighting System	L
Colour	١
Connection Type	F
Dimension (W x H x D)	-
Distance between Mounting Holes	5 8

white PRS 84 mm 0,5 m IP67 12 - 24 V





12 - 24 V

LED 102 x 32 x 15 mm

R3, R7, R10

LED

white

PRS

90 mm

0.5 m

R3, R7

12 - 24 V

IP67

111 x 50 x 24 mm





Colour

Colour

# Side Markers



Lighting System

Connection Type Dimension ( $W \times H \times D$ ) Distance between Mounting Holes Cable Length Fulfills ECE Norm Protection Type (IP Code) Voltage

LED orange (amber) PRS 130 x 32 x15 mm 116 mm 0,5 m R3, R91 IP67 12 - 24 V

Lighting System

**Connection Type** Dimension (W x H x D) Distance between Mounting Holes Cable Length Fulfills ECE Norm Protection Type (IP Code) Voltage

LED orange (amber) PRS 130 x 32 x 14 mm 116 mm 0,5 m R3, R91 IP67 12 - 24 V



LED orange (amber) PRS 102 x 45 x 14 mm 84 mm 0,5 m R3, R10, R91 IP67 12 - 24 V



LED orange (amber) PRS 111 x 50 x 24 mm 90 mm 0.5 m R3, R91 IP67 12 - 24 V



Side Markers I Acessoires

For all our Position- and Sidemarkers we offer the fitting Brackets

febi 173980

febi 173979

febi 173981



Dimension ( $W \times H \times D$ ) Distance between Mounting Holes 116 mm Material

Plastic



130 x 46 x 41 mm

**Number Plate Lights** 

febi 173958

Cable Length Approvals Voltage

febi 173959



Lighting System **Connection Type** Dimension (W x H x D) Cable Length Fulfills ECE Norm Approvals Protection Type (IP Code) Voltage



Dimension ( $W \times H \times D$ ) 99 x 72 x 22 mm Distance between Mounting Holes 50 mm, 84 mm Material Plastic

febi 171948



Lighting System **Connection Type** Dimension (W x H x D) Cable Length Approvals Protection Type (IP Code) Voltage



109 x 69 x 22 mm Dimension ( $W \times H \times D$ ) 90 mm Distance between Mounting Holes Plastic Material



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Lighting System **Connection Type** Dimension ( $W \times H \times D$ ) Fulfills ECE Norm Protection Type (IP Code)

LED PRS 53 x 80 x 59 mm 0,5 m R4, R10 SAE, EMC IP67 12 - 24 V

LED PRS 90 x 31 x 46 mm 0.5 m R4. R10 EMC IP67 12 - 24 V



LED PRS 632 x 146 x 58 mm 0,5 m R4 IP67 24 V







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